Community-Based Initiatives Series 15

Good practices in delivery of primary health care in urban settings

World Health Organization
Regional Office for the Eastern Mediterranean

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Preface

Rapid urbanization and its economic, social, environmental and health impacts affect all countries and regions of the world, particularly developing countries. The theme of World Health Day 2010 "Urbanization and Health" was selected in recognition of the formidable health challenges faced in urban areas. Urban health encompasses social determinants of health, environmental health, violence, road safety, healthy lifestyles, food safety and security, healthy housing and space, facilities for recreation and a sense of individuals belonging to the community.

Since 1986, WHO has been actively involved in promoting urban health through the healthy city programme. In 1992, the WHO Regional Committee for the Eastern Mediterranean discussed the subject of rapid urbanization and its impact on health and adopted a resolution (EM/RC39/R.2) urging Member States to promote the concept of healthy cities. Since the implementation of the healthy city programme in the Islamic Republic of Iran in December 1991, good progress has been achieved in the Region. The programme has expanded to Afghanistan, Bahrain, Iraq, Oman, Pakistan, Saudi Arabia and Sudan, covering a population of nearly 13 million. However, the programme still requires additional resources and commitment by all stakeholders.

According to *World health statistics 2010,* in 2008 the Region's total population was 580 208 million. Almost half (49%) of the Region's population are urban dwellers. Rapid urbanization is characteristic of many countries in the Region. It is driven by rapid population growth and by economic and development policies that have encouraged a change from agrarian to urban-based economic activities. Currently, in 14 countries in the Region, the annual population growth rate is between 2.2% and 8.4%. Notably, in 16 countries in the Region the average urban population is far above 50%.

Health security is also a major concern in the Region, particularly in countries facing complex emergencies (Afghanistan, Iraq, Lebanon, Pakistan, occupied Palestinian territory, Somalia, South Sudan, Sudan and Yemen) and in cities and large towns in middle-income and low-income countries where urban planning, management and safety standards are often below average or deficient. Furthermore, large-scale metropolises have sizeable slums and suffer from many shortcomings in health and health-related services. Chronic urban problems related to the environment, nutrition, poverty, health services and other health-related factors are addressed in the WHO report *Health security in cities in the Eastern Mediterranean Region.* However, there is an urgent need to address acute health threats and conditions.

In order to endorse health in urban policy-making, it is crucial to put urban health challenges on national and local development agendas and to seek and secure high-level political commitment, raise awareness and public understanding and promote intersectoral partnerships and community leadership in urban health planning. Countries are encouraged to work closely with municipalities, civil society, academia and interested partners to reduce urban health inequity and promote social determinants of health-oriented health systems. Further attention on building stronger health systems, based on *The world health report 2008: Primary health care: Now more than ever,* is required.

The core values of primary health care give direction for reforming health systems in terms of universal coverage, service delivery, leadership and public policy reforms. The creation of strong health systems remains a means to an end. All the health-related Millennium Development Goals depend for their achievement on strong health systems that are based on

strong intersectoral collaboration and community leadership to respond to equity gaps. The Millennium Development Goals are not freestanding but are mutually synergistic, with poverty reduction as their ultimate goal. As of March 2012, 11 countries (Afghanistan, Djibouti, Egypt, Iraq, Morocco, Pakistan, occupied Palestinian territory, Somalia, South Sudan, Sudan and Yemen) are not on track to achieve some, or all, of the health-related goals by 2015.

This report was prepared by the WHO Regional Office for the Eastern Mediterranean, in collaboration with the WHO Centre for Health Development, Kobe, Japan. The good practices in urban health care delivery documented from the Islamic Republic of Iran, Jordan and Oman can be used by health system policy-makers, city planners, mayors, governors, mid-level managers, nongovernmental organizations and members of academia as evidence for advocacy and raising political commitment to improve health care delivery in urban settings.

Acknowledgements

This publication was prepared by the WHO Regional Office for the Eastern Mediterranean. The project was conceptualized and coordinated by a regional task force composed of Mohamed Assai, Regional Adviser, Community-Based Initiatives, and Sameen Siddiqi, Coordinator for Health System Development. Taking the concept paper prepared by the task force into consideration, a study was designed to document good practices of delivery of primary health care services in urban areas of the Islamic Republic of Iran, Oman and the refugee camps in Jordan run by the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA). Sameen Siddiqi also contributed to the design and technical review of these case studies.

The studies were conducted by: Musa Taha Mohammad Al-Ajlouni, Consultant for the Global Fund to Fight AIDS, Tuberculosis and Malaria, Jordan; Maryam Salim Mohammed Al-Khussaibi, Head of Primary Heath Care Directorate, Ministry of Health, Oman and Kamel Shadpour, Coordinator, Health Sector Reform, Islamic Republic of Iran. Technical input and final review of the three case studies was provided by Samar Elfeky, WHO Regional Office for the Eastern Mediterranean and Riikka Rantala, WHO Centre for Health Development, Kobe, Japan.

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Executive summary

Rapid urbanization and its economic, social, environmental and health impacts are distinct characteristics of many countries in the WHO Eastern Mediterranean Region. Urbanization is driven by rapid population growth and changes in economic and development policies. Most capital, investment and public facilities are concentrated in cities. The large cities and metropolitan areas also have most of the non-agricultural jobs and income-earning or educational opportunities. The imperatives of national economic growth are focused on urban areas. As a result of these factors, in 16 countries in the Region the average urban population is far above 50% of the total population.

The lack of adequate urban planning, management and an enforceable legal framework, as well as poor governance, are the root causes of health challenges and poor quality of life in cities. Access to safe drinking water, sewerage, air pollution, environmental hazards and unsafe housing is still below standard in many cities, particularly in the urban slum areas where vulnerability is higher compared with advantaged areas. In these areas, violence and injuries are rising and health coverage is often poor for many reasons, including lack of a well-structured health system; the presence of a variety of health care providers with no coordination mechanism; and the long working hours of most family members that mean that little attention is paid to health care services, particularly preventive care.

Health managers face many challenges in urban areas. The lifestyle-related health risks for both the rich and the poor have increased substantially due to urbanization. Unhealthy diets and a sedentary lifestyle with little physical activity are common characteristics of people living in urban areas. Tobacco and illicit drug use is rising.

Delivery of quality health care services to the urban inhabitants of the megacities of the Region is a complex issue that should be assessed and corrective measures should be taken by city planners and managers. To encourage city planners to move towards improving urban primary health care services, the WHO Regional Office for the Eastern Mediterranean, in collaboration with the WHO Centre for Health Development, Kobe, Japan, documented good practices in delivery of urban health care in the Islamic Republic of Iran, Jordan and Oman. These practices can be used as evidence for advocacy and raising political commitment for improving health care delivery in urban settings.

In 1990, the women health volunteers programme was initiated as part of the Islamic Republic of Iran's health care system. In urban areas, this programme builds a bridge between households and their respective health centre. At present, nearly 100 000 women health volunteers cover more than 20 million people in urban areas across the country. According to the case study, 93% of households consider these volunteers to be the key to their behavioural changes, and 92% are quite satisfied with their work. The study concludes that the women health volunteer initiative in the Islamic Republic of Iran is one of the best examples of low-cost health interventions, worthy of being examined and promoted.

The Ministry of Health in Oman considers primary health care to be the first and main entrance to its health care systems at the different levels, providing the first level of contact between the community and the health system. Moreover, the ministry acknowledges that health is part of the development process in the community and is influenced by social, economic and educational aspects. Health care services are planned and managed through district (*wilayat*) health committees and community support groups. The wilayat health system

plays a pivotal role in addressing social determinants of health and provides the ideal platform for intersectoral collaboration and community participation. The three selected cities for this case study – Seeb, Sohar and Sur – have all shown sociodemographic growth and expansion, which reflects on the health of the population and affects the health indicators. The success of this intersectoral collaboration requires increased community awareness on health issues, and involves maintaining and motivating health volunteers and sustained collaboration between the Ministry of Health and other sectors.

The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) has been the main comprehensive primary health care provider for Palestine refugees for the past 60 years. It promotes a comprehensive approach to health care from preconception to old age, with a strong focus on primary health care and prevention. Primary health care services are provided free of charge for Palestine refugees living in Jordan through UNRWA's network of 24 primary health care facilities and mobile clinics (16 inside and 8 outside the camps). There is emphasis on maternal and child health services, including family planning, disease prevention and control, and on reimbursement of costs of secondary and tertiary medical care at public and private health care facilities. UNRWA's health care programme offers comprehensive medical care for less than US$ 15 per capita per year.

The study covers two of the largest refugee camps in Jordan and shows that universal coverage and access to quality, comprehensive, integrated and continuing care is well practised in UNRWA camps. A life-cycle approach to health care services is applied at the health centres. The UNRWA health care system has developed a proactive system of risk assessment, surveillance and management. Among the major successes of this practice are keeping and maintaining "healthy family" files; home visits to follow up special cases; a clear mechanism for active participation of refugees in health care assessment; and planning, implementation, monitoring and evaluation through the camp health committee. In-service training is regularly offered for all health care providers and more than 72% of staff said they had extremely excellent or very good overall satisfaction. Patient satisfaction is high: about 90% of the interviewed clients in both centres rated their overall satisfaction as excellent/very good or good.

Based on the outcome of these three case studies, to ensure that the urban poor have access to quality primary health care services, countries will need to:

- build a sustained mechanism for intersectoral collaboration for health development;
- encourage community participation in urban health planning and management;
- allocate sufficient resources to cover the needs of the most vulnerable citizens living in the urban slums.

Islamic Republic of Iran

Islamic Republic of Iran

Introduction

This case study documents good practices in the provision of primary health care services in the Islamic Republic of Iran. In 1985, the country adopted a new health care system based on a primary health care approach. In rural areas, "health houses" adopted a door-to-door service to overcome problems of drop-out. In urban areas, urban health centres were designed with the following factors in mind.

1. Higher literacy levels in an urban community would guarantee regular follow-up on health matters. This would help service delivery by obviating active follow-up, which would significantly increase the cost of service and referral of patients to the nearest urban health facilities.
2. The condensed nature of a city would allow families to be closer to health facilities.
3. Communication facilities in urban areas, such as telephone and mail, would allow the health centres and households to communicate well with each other.

However, in practice, things were different, especially in the periphery of large cities, where people's behaviour is dominantly rural. Most of the services were seriously hampered by negligence and the discontinuation of women health volunteer services. This necessitated design of a more efficient system, which would function similarly to the health houses and would provide more follow-up and communication, including door-to-door follow-up. Thus, the "health post" came into existence.

In 1990, a study on living conditions, environment, morbidity, mortality and reproductive behaviour in slum areas of southern Tehran initiated the formation of a new health care category, the women health volunteers (1). The women health volunteers are under the supervision of one urban health centre, to which they report their data. The volunteers come in to the centre for initial orientation and instruction. At the same time, they report new patients screened in their community and gain help for solving their problems. Each volunteer covers 40–50 households. This service is voluntary and there is no reimbursement. Currently, there are 68 000 registered urban volunteers, plus an additional 27 200 nomadic volunteers, who together cover almost 16 million people.[1]

Methodology

To assess the current situation regarding the women health volunteers, the following methods were employed:

- a literature review;
- field visits and rapid assessments;
- interviews with managers both inside and outside the health sector, and with key stakeholders; focus group discussions[2]

[1] Ministry of Health, Centre for Network Expansion and Health Promotion, Unit Responsible for Health Volunteers, 2010 (personal communication).

[2] [illegible] both inside and outside the health sector. From within [illegible] family health technicians; 32 disease control technicians; 20 environmental health technicians; and 30 persons in charge of three [illegible] health programmes within the district health centre. From outside the health sector there were three participants from the office of each of the following authorities: Chairman of the City Council; District Governor; Mayor; Chief of District [illegible] Commission for Women Affairs (under the Presidential Office).

- to assess the level of community satisfaction and the community's involvement with the volunteers;
- a review of the health management information system and a report in connection with the volunteers.

Women health volunteers

A community health volunteer is a married woman[3] selected from the community served by the urban health centre and trained in a number of prevailing health issues such as maternal and child health, family planning, the expanded programme on immunization, and health education. The volunteer serves about 50 households in the locality in which she lives. She must have a certain level of literacy; the consent of her spouse (if married); an enthusiasm for the work; spare time; and a good standing within her community.

There are two phases in the women health volunteer training programme: the preparatory phase and the supplementary phase. The preparatory phase covers three main topics: the district health network; community participation; and communication skills. The supplementary phase covers more than 30 topics, each covered by a training manual. The topics include family health; reproductive health; child health; communicable and non-communicable diseases; and sanitation and personal hygiene.

The training programme is neither time bound nor content bound. Soon after the early expansion of the programme, the need arose for more comprehensive and attractive training manuals to ensure the volunteers' knowledge was kept up to date. The United Nations Children's Fund (UNICEF), Tehran, provided funds which resulted in a guidebook for women health volunteer activities; a guidebook for trainers; and a collection of five different books for the volunteers, covering more than 30 topics.[4]

The functions of the women health volunteers are to:

- attend a weekly educational session;
- provide health education to households under their coverage and encourage them to use existing health care services;
- follow up on defaulters;
- report births, deaths, migration and the use of contraceptive methods in their households;
- mobilize the community and draw upon the collaboration between different sectors to alleviate health and environmental problems in the neighbourhood;
- participate in research activities conducted by the health centre.

The women health volunteers communicate between the various socioeconomic sectors, bringing their acquired knowledge and skills to the households. They serve as neighbourhood almanacs for their respective urban health centres (*1*).

[3] During the expansion phase this criteria was revised to make the programme more responsive to the enthusiasm shown by unmarried volunteers.

[4] These include: maternal care; neonatal care; child care; breastfeeding; immunization; child growth (including nutrition and development); diarrheal diseases; respiratory infections; home injuries; first aid; mental health; sexual health; environmental health; pre-marriage health; personal hygiene; oral health; and vector control.

Literature review

Assessments and other studies

A rapid assessment carried out approximately seven years after the initial pilot exercise asserted that, between 1991 and 1997, the numbers of women health volunteers, the urban health centres benefiting from them and the populations covered by their services all increased (Table 1) (*1*).

In 1993, when the programme was expanded to cover the entire country, the Ministry of Health and Medical Education faced the crucial question: "Has the women volunteer programme really increased the knowledge and improved health practices within the community?". Therefore, to evaluate the programme's impact, they randomly selected a sample population from approximately 12 500 people (2500 households) covered by 23 selected urban health centres across the country to compare:

- practices within the community before and one year after being served by women health volunteers;
- urban health centres with women health volunteers and urban centres without women health volunteers (control centres).

At the end of the assessment, the research team concluded that women health volunteers did have an impact and that this impact was greatest where the community had a relatively lower knowledge or performance of good health practices such as child growth monitoring, management of children with acute respiratory infection, and timely care of infants and children 1–4 years of age (Table 2). The report also emphasized that, in most of the comparisons, the centres with women health volunteers were in a significantly better situations than those without.

A more comprehensive study on effectiveness of the volunteer programme was carried out by the Ministry of Health and Medical Education in 2002 (*3*). The aim of this study was to evaluate the impact of the programme on knowledge and practice of the women health volunteers themselves and the households under their direct or indirect coverage. The study was extended to evaluate the impact of the volunteers on the programme supervisors; health workers' behaviour within the health centres; officials outside the health sector at district level; and the performance of the health centres.

Table 1. Expansion of the women health volunteer programme in the early years

Year	Population covered	Number of women health volunteers	Number of urban health centres
1991	58 500	200	4
1997	9 700 000	34 180	1188

Source: UNICEF, 1998 (*1*).

Table 2. The impact of women health volunteers on literate versus illiterate women with regard to various subjects

Subject	Improvement in awareness of literate women (%)	Improvement in awareness of illiterate women (%)
Water/sanitation	9	15
Management of diarrhoea in children	21	28
Breastfeeding	8	17
Management of children with acute respiratory tract infection	21	23
Use of contraceptive methods	35	23
Proper age and spacing for births	11	27
Growth monitoring in children	41	23
Antenatal care	15	14
Importance of regular and continuous child care	24	19

Source: (2)

The study included interviews with the following systematically randomized samples:

- 700 women health volunteers who were working at the time of the study;
- 300 ex-women health volunteers;
- 500 urban health centres;
- 400 programme managers from all over the country;
- 200 district health centres;
- 240 officials from different sectors at district levels;
- 400 households directly covered by the volunteers;
- 200 households indirectly covered by the volunteers.

The results of this study were as follows.

- A total of 82% of the volunteers and 94% of their spouses were eager for the work to continue. In 86% of cases, the husband was the most encouraging person in the volunteer's family. However, in 17% of cases, offspring were not happy to see their mother working as a health volunteer.
- A total of 89% of the volunteers declared that what they had learnt on health matters had also had an obvious impact on their own and their families' behaviour in terms of nutritional habits, keeping healthy, and environmental health issues.
- The ex-volunteers had worked as volunteers for between 2 and 10 years and declared "time constraints" as the main reason for discontinuing their work.
- A total of 80% of the health staff in health posts and urban health centres were quite pleased to work with the volunteers.
- However, 86% of the programme managers were dissatisfied with the volunteers' work.
- Interviews with families showed that 83% "were aware" of the volunteers.

- For 62.9% of the volunteers, the main reason for an encounter with a family was to encourage the family to consult their health centre and continue utilizing its services.
- A total of 74.6% of households acknowledged their pertinent volunteer and 65.6% acknowledged their volunteer's role to be very effective in changing their attitude, as well as their social and health behaviours, especially concerning how to take oral contraceptive pills.

Among the institutions outside the health sector, the Commission for Women's Affairs and the Environment Administration (both coming under the President's Office) showed the highest and the lowest familiarity with the women health volunteers programme, respectively.

Another study compared knowledge and performance on health matters in two groups of households (case and control, with 400 households in each group) (*4*). The investigation was on a pre- and post-test basis over a five-year period (1995–2000). The researchers found significant differences between knowledge and performance in the case and control groups, in favour of the former.

A further study looked at the outcome of women health volunteers on knowledge and performance of case households (covered by volunteers) and control households (with no volunteers) in nine districts of Tehran metropolis plus four independent districts of Tehran province (four clusters of 10 households each) (*5*). The study showed significant improvement in knowledge regarding family planning, timely Pap smear examination and child growth in the case group compared with the control group. However, this improvement was not found in other areas such as environmental health, management of children with diarrhoea or acute respiratory infection, or in antenatal care.

However, other investigators looking at the impact of women health volunteers on improving the households' performance in the small city of Yasuj came up with quite different results (*6*). These researchers compared health indicators in all children under one year old in an urban area served by volunteers (cases) with children of the same age in an area not served by volunteers (controls). They reported that there was no significant difference between case and control groups in terms of the variables investigated and concluded that the women health volunteer programme had no effect on improvement of either health services or the health indices of the households.

Strengths, weaknesses, opportunities and threats

An extensive analysis of strengths, weaknesses, opportunities and threats carried out for the women health volunteer programme indicated the following. (*7*).

Strengths

- There is a comprehensive and attractive set of educational materials.
- There are competent coaches to teach the volunteers.
- The large number of interesting health programmes encourages the women health volunteers to become involved in and serve their own community.
- A large number of volunteers donate their time and effort.

Weaknesses

- The educational materials, though of high quality, are insufficient in quantity.
- Health personnel are busy with their daily work and have limited time, if any, to train the volunteers.

- There is a severe shortage of space for the volunteers to attend training sessions within the urban health centres.
- It is a time-consuming process to empower people with a sense of responsibility.
- There is no budget for training the volunteers.
- Many qualified health personnel are not willing to spend time with the volunteers.
- There is a severe shortage of educational equipment/material for the volunteers.

Opportunities

- To motivate higher health authorities.
- To increase the present literacy rate among women.
- To receive support from different nongovernmental organizations.
- The possibility of using the power of the Board of Trustees in the medical universities.

Threats

- The volunteers do not have the benefit of a structural organization within the health system.
- The development agencies' lack of interest in collaborating with the volunteers and in helping intersectoral cooperation become established.
- The predominance of a top-down approach in health planning, leaving little room for the volunteers to show their capability and creativity.
- People's lack of knowledge about the community-initiative programmes.

Discussion

Most of the literature reviewed shows the positive impact of the women health volunteers' endeavours in upgrading knowledge, improving practice and changing behaviours in the households served by them. These are all important and valuable achievements, providing proof of the benefits of the programme.

However, the last study reported expressed very different results on the programme's effectiveness. Leaving aside methodological issues, which were not scrutinized in any of the reported studies, these different findings may be explained as follows.

- An initiative such as the women health volunteers programme, by its very nature, requires much political commitment, social and operational support and reasonable appreciation for services given by those who are expecting very little.
- Initiatives such as these may benefit from a great deal of technical and administrative support from local health authorities and experienced technical groups during the pilot stages.
- Even in the best situations, a programme is lucky to have technical, administrative and social support in place during the first years of its expansion phase.
- Gradually, the different types of support may decrease and reach a critical or even harmful level.
- Poor local management may worsen the situation.
- Many noble ideas are defeated by weak implementation or insufficient management interest.

Whether the women health volunteer programme is currently facing such a situation is beyond the scope of this case study and requires an independent and more extensive investigation. However, there are some signs reinforcing this suspicion.

- There is a high turnover of programme supervisors, which could jeopardize the teaching and learning process and harm transfer of knowledge and skills.
- During the initial phase of programme expansion, a set of educational materials was distributed to all the supervisors and volunteers. However, the volunteers no longer have access to an entire set of materials and now share materials with other volunteers or have to use their urban health centre library.
- The volunteers complained about increasing pressure from their children to stop volunteering and there is no evidence that in such situations they have been supported by the health system. However, verifying this was beyond the scope of this case study and needs to be explored separately.
- Some qualified health personnel in urban health centres are not willing to spend time educating or assisting volunteers to perform their tasks better.

Field visits/focus group discussions

From a total of 46 universities of medical science across the country, eight were selected to represent different areas in the north, south, east and west of the country. The sample size within each selected university was proportional to the total number of women health volunteers. The district health centres, urban health centres and health posts were selected randomly. In each selected urban health centre, three households served by volunteers and three households with no volunteers were selected randomly for focus group discussions. In each district, two officials from the district development sectors (education and social welfare) were chosen as candidates for the officials outside the health sector who were to be interviewed. Qualified staff from different health programmes were assigned to run the interviews and focus group discussions. The number of sites visited and people interviewed were as follows:

- 12 urban health centres/health posts;
- 16 officials outside the health sector;
- 27 households served by volunteers;
- 27 households with no volunteers;
- 60 health personnel in district health centres who worked with volunteers;
- 70 volunteers (currently active or ex-volunteers) with at least five years' experience;
- 90 health staff in urban health centres or urban health posts involved in some way in the women health volunteer programme.

The main results of the field visits/focus group discussions are summarized below.

Women health volunteers

Of the volunteers interviewed:

- more than half were between 24 and 34 years;
- 68% were married and 32% were single;
- 25% of those married had no children and 25% had one or two children;
- more than 50% were high school or college graduates.

Service continuation rate is an important issue in this programme. In the initial phase, there was quite strong support from the families (husbands and children). Currently, however, support appears to be decreasing, although this requires further study.

"Conveying what they are continuously learning" was not the prime reason the women gave for working as health volunteers. It was in fact the third reason, coming after "willingness to attend the educational sessions" and "helping health care staff in their daily work". The volunteers were least interested in contacting different sectors in order to solve problems brought to them by their households.

The length of time that the volunteers collaborated with the health care delivery system was as follows:

- less than 1 year 10%
- 1 year to less than 4 years 40%
- 4 years to less than 7 years 20%
- 7 years to less than 11 years 20%
- 11 years and more 10%

The majority of ex-volunteers stated time constraints and extreme workload as the main reason for giving up.

Relationship between women health volunteers and households

The level of familiarity of the respondent households with the women health volunteers was as follows.

- 100% of households served by a health volunteer knew the programme and the function of the volunteers, while only 27% of the households that never had a volunteer knew about the programme and its functions.
- 89% of those covered by the volunteer programme knew their volunteer by name.
- During the three months prior to the focus group discussions, the volunteers had communicated with households:
  - at least once 31%
  - twice 18%
  - three times 14%
  - four times 14%
  - five times 14%
  - six or more times 9%
- A total of 42% of the households "completely accepted" the information that the volunteers conveyed to them, 31% "accepted relatively" and 27% "disagreed with" the information.
- 93% of households considered that the volunteers had been the key to changes in their health behaviour.
- 92% of households were "quite satisfied" with what their volunteers had done for them.

Supervisors

The supervisors in charge of the women health volunteers play a very important role in guiding and encouraging them in their duties.

- The majority of the supervisors reported 1–8 years of working closely with the volunteers.
- 70% were satisfied with their job; of those who were dissatisfied, 58% cited difficulties at work and 28% gave limited facilities as the main reasons for their dissatisfaction.
- 93% had attended an educational workshop to become familiar with the function of the volunteers.

- 90% were satisfied with the content of the educational materials given to the volunteers.
- 80% considered the volunteers to be very effective in promoting community health.

District officials

Interviews with district officials included mayors, members of the Commission for Women Affairs, the District Department for Education, Welfare Office, Environment Administration, as well as the District Health Manager resulted in the following findings:

- 90% knew the women health volunteers and their functions well;
- 80% had had at least one encounter with a volunteer during the previous 12 months;
- 80% had received at least one request from a volunteer during the previous year;
- 60% had done something effective in response to a volunteer's request.

Impact of the volunteers on the health management information system

The urban and district health centre staff usually acknowledged the work of the women health volunteers, reporting that the volunteers kept them informed about vital statistics such as migration in and out of the area as well as contraceptive use. They claimed that the frequency of this information helped them to catch newcomers to the area and commence health services. This is a very important benefit, especially in periurban areas with high migration in and out. The impact of this particular part of the programme requires further exploration in an independent study.

Conclusion

The women health volunteer initiative in the Islamic Republic of Iran is one of the best examples of low-cost intervention as a model of community participation in urban health development. With a reasonable level of political commitment, along with social appreciation and support, thousands of enthusiastic individuals contribute greatly to a health care delivery system, costing the health system next to nothing. Access to health care is crucial. In urban settings, the volunteers are key agents in encouraging households to utilize the available health services and their involvement also decreases the drop-out rate. Based on the study conclusions, a number of action points were identified.

- Conduct a proper evaluation of the country's experience with the women health volunteer programme, which covers almost two decades, to explore its strengths, weaknesses, opportunities and threats.
- Explore mechanisms to sustain morale among the women health volunteers and reduce attrition rates, which are a prevailing and observable loss for the programme.
- Introduce more innovative methods of support for the volunteers to enable them to cope with problems related to their humanitarian work.
- Apply the results of other valuable community-based approaches, such as the WHO basic development needs or healthy city programmes,5 to support the women health volunteers when they are working with sectors outside the health sector.
- Network with other countries to exchange knowledge, new ideas and experiences.

[5] http://www.emro.who.int/cbi/

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Oman

Oman

Introduction

This case study documents good practices in the provision of primary health care services in Oman. The Ministry of Health considers primary health care to be the most important element of the health care system in Oman. Primary health care centres serve the needs of more than 85% of the population. The Ministry of Health is involved in all aspects of the primary health care structure, processes and outcomes: its infrastructure; catchment area; health care delivery service facilities; the integration of all primary health care programmes; quality assurance; and community activities and intersectoral involvement to strengthen health care services.

Currently, primary health care services in Oman are delivered by a network of 206 institutions that provides comprehensive and specialized care to the population. This network consists of 157 health centres, 20 extended health centres and 29 local hospitals (Figure 1). The types of services provided are maternal and child health care; control of communicable diseases and noncommunicable diseases; malaria eradication; AIDS and sexually transmitted diseases; school health, screening for chronic diseases; dental care; health education; nutritional advice; adolescent health; elderly care; home care; and mental health.

Health status indicators

The Ministry of Health is highly committed towards improving the health status of its population and providing accessible health care through primary health care institutions throughout the country, supported by well-structured secondary and tertiary care. Table 3 lists some of the national health indicators. Economic and social development, as well as the implementation of sound health policies and strategies, has resulted in rapid and significant changes in health and mortality patterns over the past four decades. Oman's current health indicators compare well with those of many developed countries. Pregnancy-related mortality and morbidities, preventable diseases of childhood and communicable diseases appear to be well managed or controlled.

Figure 1. Number of Ministry of Health primary health care centres in Oman (1970–2009)

Table 3. Health status indicators in Oman, 2009

Health indicator		Value
Infant mortality rate (per 1000 live births)		9.6
Under-5 mortality rate (per 1000 live births)		12.0
Average life expectancy at birth		72.7 years
Male life expectancy		70.0 years
Female life expectancy		75.7 years
Maternal mortality ratio (per 100 000 live births)		13.4
Immunization coverage		
BCG		90.9%
OPV and IPV		98.0%
DPT		99.8%
Hepatitis B		99.8%
Hib		99.9%
Pneumococcal vaccine	Dose 1	99.8%
	Dose 3	65% (introduced May 2009)
Measles/MMR1 (MCV1)	Dose 1	99.9%
MMR (MCV2)	Dose 2	99.9%

BCG Bacillus Calmette-Guérin; DPT diphtheria, pertussis and tetanus; IPV inactive polio vaccine; MCV measles-containing vaccine; Hib *Haemophilus influenzae* type B; MMR measles, mumps, rubella; OPV oral poliovaccine.

Source: Ministry of Health, 2009 (*1*).

Features of primary health care in Oman

Adaptation of services according to local needs

The primary health care philosophy in Oman is built on WHO's *Global strategy for health for all by the year 2000* (*2*). It considers primary health care to be the first and main entrance to the health care system (primary, secondary and tertiary) and that primary health care provides the first form of contact between the community and the health system. This philosophy is redesigned to suit the local circumstances, taking "equity" as an essential element to ensure the fair and equal distribution of resources to all of the Omani population. The philosophy accepts that health is part of the development process in the community and is influenced by social, economic and educational aspects. Primary health care in Oman actively involves members of the community (individuals, families and groups) to achieve better health and development (*3*).

The primary health care strategy in Oman is designed to match changes in the epidemiological pattern of diseases by focusing on the expansion of the primary health care service to include outpatient specialized care. The transformation in care delivery is in response to the changing trends of diseases, the varying needs of the population, and the increased cost of health care.

The health care policy considers the availability, accessibility, continuity and comprehensiveness of care, and community participation, as the main entrance towards establishing a strong and organized primary health care service. Primary health care services

have expanded and now cover almost 95% of the Omani population. To strengthen the role of primary health care and to ensure sustainability of services towards end-users, families and the communities, the primary health care policy emphasizes three main issues:

- strengthening primary health care at the central level;
- decentralization of the service to the wilayat (district) level;
- integration of specialty care at the health centre level.

Improvement in health centre accessibility

The number of primary health care institutions in Oman has increased from 167 to 206 in the past four years. The expansion in health care delivery is accompanied by identification of the residential catchment areas of each health centre, an increase in the latest medical equipment and provision of extra medical, technical and administrative staff to meet the demands of the health system. The primary health care policy in Oman considers equity of health, accessibility, availability, continuity and comprehensiveness as prerequisites to primary health care provision. The introduction of quality management systems in primary health care has addressed the quality of primary health care services by applying different methods of monitoring and evaluation, for example satisfaction surveys for both clients and staff.

Decentralization of authority from central to district level

Decentralization of primary health care is a growing phenomenon and is now a main feature of the organization of Omani primary health care services. The most recently introduced structure, especially in the Muscat region, is the wilayat health directorate. A wilayat health directorate is supported by a team that looks after the health services and ensures smooth running of the health centres. The directorate also aims to strengthen primary health care by building communication channels with the community and other health-related sectors. Currently, there are 16 wilayat health directorates spread across Oman. As there is a need to balance the decision-making process to become more bottom-up, the terms of reference of the wilayat health directorates have been revised and include upgrading public health agenda within the catchment area of the health centres (*3*).

Community participation and intersectoral approaches in health

Community participation

The health systems in all 11 regions and 61 wilayats recognize the importance of community participation in primary health care to achieve the "health for all" principle. Social determinants of health are addressed through different approaches, including district (wilayat) health committees, community support groups and community-based initiatives. A region may have more than one wilayat health committee, depending on its population.

Wilayat health committees

Wilayat health committees were established in 1999 and are district-level intersectoral committees that plan, liaise and supervise health-related matters in the wilayats. The main function of the wilayat health committee is to organize community-based health activities and to help the community solve specific health problems. The wali is the chairman of the committee. Members represent different governmental sectors, state council members and the community. The committee meets three to four times a year and about 25 health or health-related problems are tackled each year through problem-solving approaches. Topics discussed include environmental health projects; care needs of the elderly; and obesity and activity projects.

Community support groups

Community support groups were established in 1992 and there are now 4321 members. The ratio of male to female members varies from year to year but on average there is 1 male member to every 10 females members. Female members are more accepted by families, facilitating access to homes and communication with mothers and children. The level of education of members varies from elementary school to university graduate, but the majority of members have completed general education. Members receive basic training on many subjects, including communication skills; reproductive health; nutrition and calculating body mass index; testing blood glucose and haemoglobin; and improving the home environment. The members have three main roles:

- community health diagnosis through data collection;
- increasing awareness and promoting health activities in the community;
- documenting activities in the community documentation centre.

Community-based initiatives

The Ministry of Health in Oman, in collaboration with other sectors and communities, has succeeded in promoting health in the community with the goal of improving the quality of life rather than simply reducing morbidity and mortality. A total of 16 community-based initiatives have been launched by the Ministry of Health to further strengthen the community focus of health services and programmes. Examples of these initiatives include:

- the Nizwa Healthy Life Style project (2000);
- the Sur Healthy City project (2003);
- the Qalhat Healthy Village project (2003);
- the Muscat Healthy Neighbourhood and Villages project (2004);
- the Healthy City projects in Sohar and Salalah (2006).

Examples of activities implemented include safe drinking water; availability of healthy food choices in the market; illiteracy-free villages; community information centres; walking pathways (there are four in Sur and one in Nizwa); and promoting healthy active lifestyles in schools.

Links between the community and primary health care

As described, there are strong links between the community and primary health care in Oman through involvement of community members on the wilayat health committees. These committees are responsible for planning, monitoring and evaluating the five-year health development plans. In addition, they also:

- promote the concept of the importance of health;
- increase general knowledge about health;
- mobilize community resources through community-based projects and increase effective participation in these projects;
- facilitate and coordinate collaboration between the Ministry of Health and other health-related sectors and national associations.

Reports by the Ministry of Health show that these committees have targeted a number of important health problems affecting the community and other health care workers within the health institutions. For example, the committees discuss topics related to the health services provided by the health institutions and also topics related to health problems outside the routine health services (3).

Impact of community participation on health

The following examples illustrate the impact that the community has had on health in Oman:

- a reduction in cases of protein energy malnutrition in children under five years of age;
- the provision of basic developmental needs through wilayat health committees in some villages (e.g. roads, electricity and clean water supply);
- the establishment of fitness halls for women in the communities (20 such halls have been built during the past five years);
- the initiation of more than 10 projects providing a clean water supply and storage;
- the initiation of several social projects for needy families;
- the integration of over 40 screening programmes for risk factors for noncommunicable diseases in the primary health care programme;
- the establishment of well-being clinics in primary health care programmes;
- the establishment of elderly care and community outreach programmes;
- the introduction of community nursing specialists to deliver the health services and address health-related problems outside the health facility, including home visits.

Effects of urbanization on health care

Health and urbanization

Dramatic improvements have been made regarding health and life expectancy over the past three decades in Oman. Much of this health improvement has been due to improved standards of living: for example, better nutrition, housing and sanitation; better education; higher wealth and employment; improved access to health care; and the prevention of communicable diseases. However, at the same time industrialization and prosperity have led to a corresponding increase in the incidence of noncommunicable diseases, often referred to as lifestyle-related diseases, such as cardiovascular diseases, diabetes and hypertension.

Although prevention initiatives have been implemented by different government ministries with the intention of improving the quality of life of the Omani people, improvements to social, economic, cultural and physical environments are still required. In addition, the skills and knowledge of individuals and the community also need to be developed. Partnerships between the government and nongovernmental organizations, communities and individuals across Oman are the key to achieving a successful outcome of these prevention initiatives and ultimately improving the health of the population.

Gender

While women are more affected by obesity, men have higher rates of injuries and poisonings, smoking, impaired fasting glucose, unilateral hearing impairment and substance abuse. In 2007, the United Nations Development Programme ranked Oman 67 out of 156 countries in the gender-related development index, which is a measure of gender parity (*4*).

Education

The poor nutritional status of children under the age of three years has been found to be strongly associated with the mother's lower education level. Higher education was a significant predictor of contraceptive use among married women of reproductive age. People in Oman with higher education are less likely to smoke cigarettes and are less likely to be obese. Although the literacy rate continues to climb, now reaching a national level of 82.2%, some segments of society may still have a lower health status owing to their lower educational status.

Employment

Employment and working conditions affect people's health, with mortality and morbidity being higher for people with precarious or sporadic employment opportunities. A sizeable minority (13%) of the potential Omani labour force is still seeking employment, the majority of the unemployed being men (77%). In addition, 74% of the unemployed are between the ages of 15 and 24 years and have limited educational qualifications.

Housing

Poor housing conditions place some of the population at a greater risk of health problems. The percentage of Omani residents living in poor housing conditions are as follows: those living in huts (2.4%); houses with an earth floor (11.1%); houses without access to an improved water source (25%); and houses without access to improved sanitation (11%). The Ministry of Housing provides housing assistance for low-income groups, either through the provision of housing or through low-interest loans.

As growing numbers of people migrate to the larger urban areas of the country, the ways in which cities are constructed will influence whether people walk or cycle to work, participate in recreational activities or use public transport. Providing people with safe, accessible and affordable means of adopting health-promoting behaviour through implementing health-promotion strategies should be a priority in urban planning and design. However, the implementation of these strategies is complex and requires much effort from all governments sectors.

Case study: health and urbanization

In agreement with WHO, three cities were selected by the Ministry of Health for the case study to reflect the concept of health and urbanization. Three cities, Seeb, Sohar and Sur, were selected as they are categorized as urban in terms of population size (Table 4), infrastructure, existing services and economic growth. However, they differ in sociodemographic background and geography.

Sociodemographic background and geography

Seeb

Seeb occupies the west of Muscat governorate, in a narrow strip of coastline along the rim of the Gulf of Oman measuring 50 km in length and covering an area of around 3500 km^2. According to the 2003 census, the population was around 219 118, distributed among 24 villages and townships.

Table 4. Population distribution in Seeb, Sohar and Sur

Total population	Omani			Non-Omani			Total
	Male	Female	Total	Male	Female	Total	
Seeb	83 026	75 763	158 789	43 003	17 042	60 027	219 118
Sohar	46 700	46 937	93 638	26 681	6 525	33 206	126 844
Sur	NA	NA	43 746	NA	NA	29 809	72 835

NA-not available.

Sohar

After the capital, Muscat, Sohar is the most developed city in Oman. It is situated about 200 km north of Muscat. Sohar was once the ancient capital of Oman and was an important Islamic port and the largest town in the country. Although traditionally a fishing town, recently it has become Oman's industrial hub due to massive developments in the Sohar industrial port. At present, Sohar has a new port under construction, being built at a cost of OMR 120 million. The city is renowned for its copper deposits and archaeological evidence points to copper extraction being carried out 5000 years ago. There are still three copper mines in operation in Sohar with over 18 million tonnes of copper deposits.

Sur

Sur is the capital city of Ash Sharqiyah region, north-eastern Oman, on the coast of the Gulf of Oman. It is located about 150 km south-east of Muscat. Historically, Sur was an important destination for sailors and the sea still plays an important part of life in the city today. Besides fishing, there are other trades, private industries such as oil and gas, and government employment. Some major industrial projects, for example Oman LNG and the Oman India Fertiliser Company, have contributed to Sur's local development.

Primary health care organization and access to health services

The primary health care centres in the three cities deliver health care services to Omanis completely free of charge. The non-Omani population is charged a negligible amount (an annual fee of OMR 1, with a further small charge of 200 baiza for each visit). Sponsors of non-national labourers are obliged to provide health care for their workers through sister private clinics.

Sur and Sohar polyclinics are open daily from 07:00 to 14:00. After 21:00, emergencies are seen at the accident and emergency departments of Sur and Sohar referral hospitals, which work 24 hours a day. Health centres and emergency departments work the same duty hours during weekends and holidays.

Generally, there are 12 doctors and 30 nurses for each 10 000 of the population. A physician may see around 30–45 patients during seven hours' duty and specialists see approximately 15–25 patients during that time. The waiting time to see a doctor varies, but on average is 10–30 minutes.

Patients' data are computerized, with their civil number used as identification. Children and pregnant women have a special health card that facilitates access to any health centre in Oman if necessary. The essential vaccination programme covers 100% of children with 11 types of vaccines by the age of 18 months, in addition to school booster doses up to the age of 18 years. A system for retrieval of vaccine defaulters is present in all health centres through phone calls and outreach nursing teams.

The number of private institutions focusing on providing primary health care has greatly increased over the past few years, giving the local and expatriate population a wider choice in accessing and utilizing health care services in cities. The numbers of primary health care institutions in Seeb, Sohar and Sur are shown in Table 5.

Table 5. Numbers of government and private primary health care institutions in Seeb, Sohar and Sur, 2009

City	Health centres		Polyclinics		Local hospitals		Regional referral hospitals	
	Government	Private	Government	Private	Government	Private	Government	Private
Seeb	8	74	0	8	0	0	0	0
Sohar	2	33	1	5	–	1	–	1
Sur	2	6	1	4	–	2	1	–

Table 6. Utilization of health services in Seeb, Sohar and Sur

Indicator	Seeb	Sohar	Sur
Average daily visits (weekdays)	2052	2003.3	971
Average daily visits (official holidays)	444	793.7	203
Average number of radiological procedures/1000 visits	NA	101.2	105
Average number of laboratory procedures/1000 visits	NA	524.9	1818

Utilization of health services

Sur and Sohar polyclinics provide specialized services for internal medicine, paediatrics, antenatal and postnatal follow-up, ear and eye care, dental care and psychiatry. Walk-in clinics that include general practice physician services and childhood immunization programmes are present in attached health centres. Laboratory and radiology services are available in both these polyclinics. The average number of outpatient department visits per individual was 5.2 per year (2009) and the average number of laboratory tests per individual was 3.2 in 2005 and 4.7 in 2009.

A utilization review has enabled these providers to observe the utilization of different resources used in the health system. Table 6 shows some of the indicators of the utilization of the services in the three cities.

Community and health care provider satisfaction

Since the establishment of a quality system for primary health care in the Ministry of Health, quality assurance officers have been conducting surveys on client satisfaction in all three cities. Regular surveys on customer and service provider satisfaction maintain quality assurance and are an indicator of overall satisfaction with the entire service.

Figure 2 shows the top 10 areas of satisfaction for clients using primary health care services in Seeb while Figure 3 shows the top 10 areas of client satisfaction in health institutions in Sohar. It is evident that communication between the clients and staff is a very important element for clients in both cities. These surveys are carried out once a year and the results are presented in the annual management reviews.

NA not available.

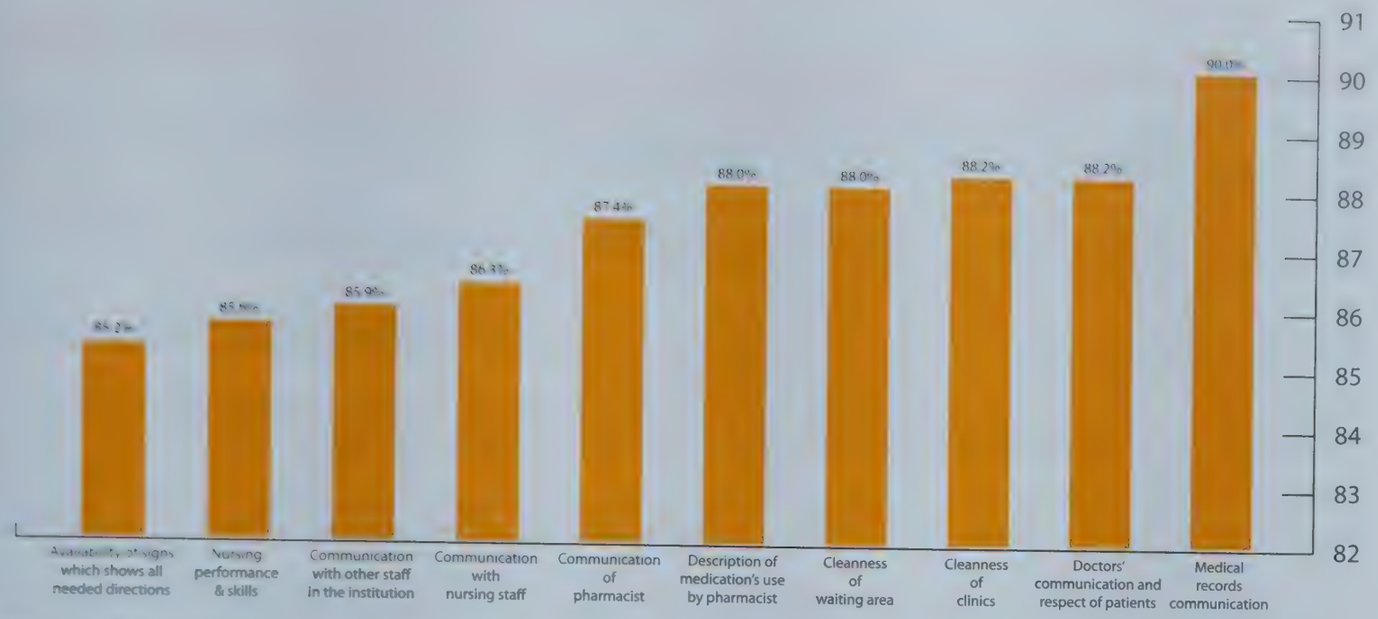

Figure 2. Top 10 areas of customer satisfaction in health institutions in Seeb, 2005

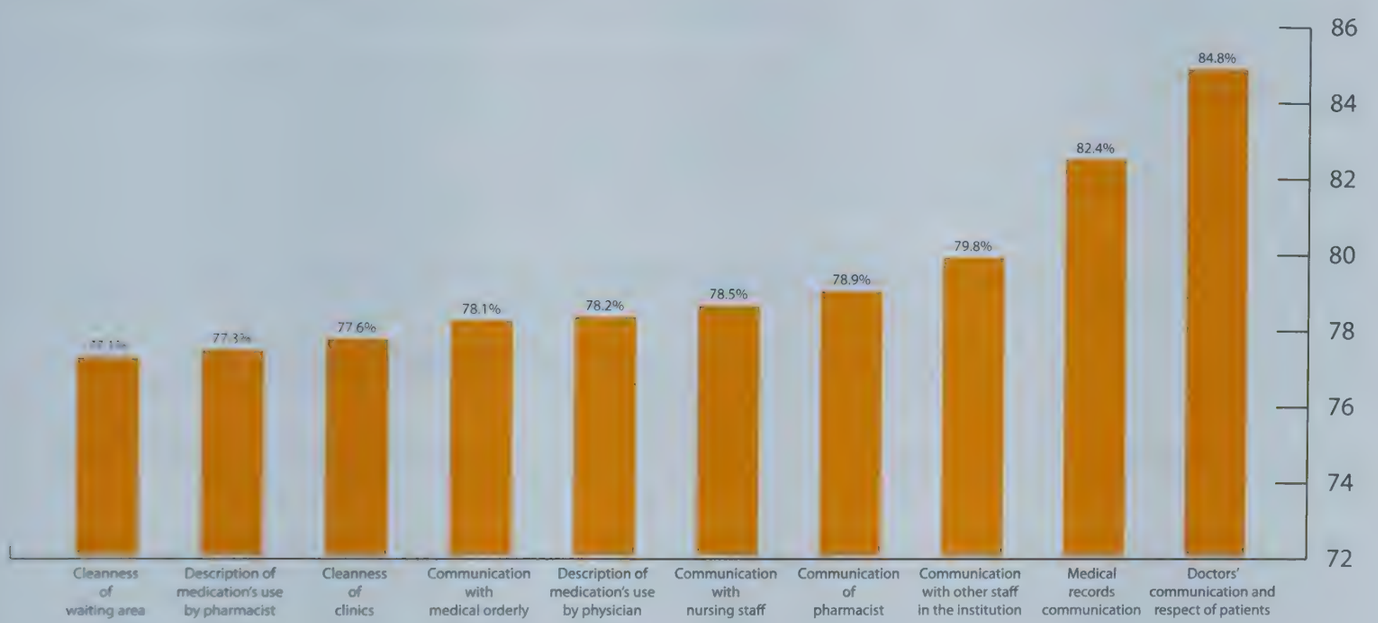

Figure 3. Top 10 areas of customer satisfaction in health institutions in Sohar, 2005

A survey on staff satisfaction conducted in Sohar and Sur showed that staff were more satisfied regarding the importance of work conducted in the health facility, communication between the staff and the tasks assigned in the health centre. Other questions in the questionnaire included satisfaction with salary and communication with other care providers. Table 7 shows the job satisfaction of staff in primary health care facilities in Sohar in 2009 while Table 8 shows the job satisfaction of staff in primary health care facilities in Sur in 2009.

Table 7. Job satisfaction of staff in primary health care facilities in Sohar, 2009

Job aspect	Score (%)
Importance of your work in your facility	78.8
Competence of staff in your facility	76.1
Quality of care you are able to provide in your facility	76.0
Type of tasks relevant to patient care assigned to you	75.1
Communication with other health care providers	74.3
Patients' appreciation of your services	73.6
Willingness of your colleagues to cooperate in your facility	73.4
Degree of satisfaction with the work of other health care providers	72.7
Decision-making ability of your immediate supervisor	72.6
Overall satisfaction with your profession	72.4
Amount of challenge in your work	72.2
Responsiveness of supervisor to your complaints and suggestions	72.0
Overall satisfaction with your work in your facility	71.8
Team spirit among different categories of personnel in your facility	71.6
Recognition of good work by your supervisor	71.5
Amount of freedom and flexibility in doing your work	70.8
Your status among other health care providers in other organizations	70.7
Your work schedule	70.4
Clarity of organizational goals	69.8
Safety, cleanliness and comfort of the working environment	69.7
Your pride in belonging to your facility	69.6
Opportunity to learn new skills and abilities (e.g. continuous professional education, training)	69.4
Impartial treatment of subordinate by your supervisor (fairness)	69.4
Satisfaction regarding patient demands	69.4
Number of hours worked per month	69.2
Amount of time you are able to spend with each patient	68.7
Opportunity to use your skills and abilities	68.1
Diagnostic laboratory tests ordered in your facility	66.7

Table 8. Staff satisfaction in primary health facilities in Sur, 2009

Health care worker satisfaction	Score (%)
Communication between doctors and nurses regarding patient care	8.2
Opportunities for promotion in your health-care organization	29.9
Recognition of good work you do by your immediate supervisor	63.6
Responsiveness of supervisor to your complaints and suggestions	64.6
Satisfaction to your salary in relation to the work assigned to do	41.3
Opportunity to learn new skills and abilities (continual professional education, training)	49.1
Your input in organizational decisions that affect your work	42.9
Average time you are able to spend with each patient	56.9
Overall satisfaction with working in your health care facility	73.4

Table 9. Number of community support groups in Seeb, Sohar and Sur, 2009

City	Number of community support groups	Male	Female
Seeb	27	10	17
Sohar	26	3	23
Sur	50	16	34

Community participation in the selected cities

Wilayat health committees were established in all three cities in 1999. Community-based initiatives have also been established in all three cities, for example Healthy City in Sur (2002), Healthy Neighbourhood in Seeb (2003) and Healthy City in Sohar (2006). The total number of community support groups is shown in Table 9.

Activities carried out by the wilayat health committees included:

- participating in national and international health days;
- participating in health exhibitions at wilayat level;
- initiating different health programmes at wilayat level, such as iron-deficiency anaemia, obesity in school children, tuberculosis social survey;
- initiating a wilayat health neighbourhood in Seeb;
- conducting workshops on child health, smoking, cancer, HIV/AIDS and H1N1 influenza programmes;
- conducting health marathons;
- increasing health awareness by strengthening health education in the community;
- organizing health teams in the wilayat for cyclone and disaster planning;
- measuring pollution levels in Hillat Al Sidr village in Seeb in 2006, in response to complaints from the citizens.

The role of the wilayat health committees in emergencies is to:

- establish committees for operational disaster management;
- communicate with different sectors;
- communicate with the community and sheikhs;
- regularly monitor the emergency plans made by the committee.

Best practices

An example of best practices from Sur is outlined below.

Obesity is one of the most significant health concerns in Oman. It is a major risk factor for serious noncommunicable diseases such as cardiovascular diseases, hypertension, stroke, diabetes mellitus and various forms of cancer. In 2006, a primary baseline survey conducted by the Healthy City initiative in Sur showed that on average 33.3% of the Omani population over the age of 20 years were overweight and 29.6% were obese. Other findings from the survey are listed in Table 10.

Table 10. Sur healthy city baseline survey, 2006

Condition	Parameter	Males (%)	Females (%)
Overweight	BMI 25–29.9 kg/m²	39.2	28.7
Obesity	BMI 30–39.9 kg/m²	21.0	36.2
Extreme obesity	BMI ≥ 40 kg/m²	1.7	8.1
Central obesity	Male > 102 cm Female > 88 cm	13.4	53.5

BMI body mass index

The rates of obesity shown in Table 10 were alarming and intervention in terms of lifestyle management was needed. Thus in January 2007, a community-based intervention to promote healthy lifestyles among females in Sur, a competition for the "ideal weight", was initiated jointly with the Omani Women's Association.

The competition targeted females over 20 years old with obesity class I and class II (body mass index 30–39.9). All participants were offered a lifestyle therapy programme that aimed to reduce their weight within three months by promoting healthy eating and physical activity, and by promoting successful role models in the local community (i.e. individual who had entered the programme and lost weight successfully).

Of the 20 participants, 13 (65%) continued the programme for the entire three months. All 13 achieved a weight reduction. In total, the 13 participants lost 106.3 kg during the three months. Their mean weight reduction was 8.2 kg (range 2.5–15.1 kg).

Although conducted on a small scale, this project gives hope that lifestyle modification can lead to a successful outcome. It also shows that individuals in Sur are ready to participate in shaping the future health status of their community.

To sustain healthy lifestyles in Sur, future plans include:

- establishing a healthy lifestyle clinic for all community members in Sur to promote healthy nutrition, weight management and tobacco cessation;
- providing a supportive environment for women in Sur to practice physical activity (e.g. walking pathways and a gymnasium in the Omani Women's Association).

Challenges and obstacles facing primary health care

The following challenges and obstacles face primary health care in the three cities:

- low awareness of the population regarding the activities of the wilayat health committees;
- limited health system and community health research;
- weak private sector involvement in some of the cities;
- low socioeconomic status in some areas of the cities;
- traditional healers' activities are not monitored or regulated;
- some families have transportation difficulties;
- more health centres are needed for the rising population;
- the increase in tobacco consumption with some of the population having little awareness of the effect of smoking on their health;
- emerging communicable diseases, such as HIV/AIDS and tuberculosis.

Lessons learnt

The following lessons have been learnt from the case study:

- Health services should grow and be distributed proportionately with the natural growth in the population and changes in its distribution. One of the strengths of the health system in Oman is that new health facilities are steadily being built each year, as required by the population.
- The health service is only one component of an overall package of social development, which includes housing, sanitation, education and decent household incomes. Government planning should consider adopting a more integrated approach, which takes into account changes in population growth and distribution. Oman has adopted such an approach.
- Preventive health services are much more cost effective and have the most favourable community impact. Programmes such as peer HIV education in schools can lessen the personal and community burden of diseases by preventing the spread of disease and the length and cost of treatment.
- There are differences between the outer and central areas of cities regarding level of income, access to a balanced diet, access to essential services and level of crowding. This is reflected in disease incidence and other health indicators. To bridge this gap, strong commitment and cooperation is needed between government sectors; for example, collaboration between the Ministry of Health and the Ministry of Education and Municipality. Private individuals in the community should also have an input.

Conclusion

Based on the case study and lessons learnt, a number of action points were identified.

- Share relevant data on health indicators and determinants of health within the concerned sectors and communities.
- Engage other governments and sectors in planning healthy cities; this includes planning community health activities.
- Involve communities in setting up policies and plans that affect their health.
- Engage government, nongovernmental organizations and communities in establishing healthy lifestyle changes.
- Make use of different mechanisms, such as community support groups, to maintain motivation in community health volunteers.
- Establish partnership with the various media in the country to promote healthy lifestyles.
- Ensure regulation of the private health sector, in order to ensure more efficient and safer services to the community.

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UNRWA

UNRWA

Introduction

This case study documents good practices in the provision of primary health care services provided by the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) to Palestinians living in refugee camps and urban areas in Jordan.

UNRWA was established in 1949 and is the largest United Nations programme in the Middle East. It provides assistance and protection to Palestinian refugees in fields of operation in Jordan, Lebanon, Syrian Arab Republic, and West Bank and Gaza Strip. It does so by offering to a population of some 5 million registered refugees a range of human development and humanitarian services in primary health care, along with a social safety net, education, community support, camp improvement and microfinance, with the aim of mitigating the effects of socioeconomic determinants on their health (*1*).

Palestinian refugees are persons whose normal residence was Palestine during the period 1 June 1946 to 15 May 1948 and who, as a result of the Arab–Israeli conflict in 1948, lost both their homes and their means of livelihood. To be eligible to receive UNRWA assistance, refugees and descendants of such persons in the male line born after 14 May 1948, must be registered with UNRWA and live in the areas of UNRWA operations.

While the refugee population compares well with middle-income countries on some indicators of human development, such as infant mortality, life expectancy, adult literacy and immunization, the picture is less positive in other areas. The prevalence of noncommunicable diseases related to lifestyle is increasing, in line with global trends. There is extreme poverty and vulnerability in all fields of operation, and clear signs that this is worsening in some fields. Unemployment levels among refugees are also high in all fields (*1*). The context in which UNRWA operates adds more challenges and pressures on the programmes it offers to the refugees, including health.

UNRWA works against a backdrop of significant trends and pressures. These affect UNRWA's ability to realize its objectives and present challenges to which UNRWA strategy seeks to respond. The factors include the absence of a peaceful solution to the Israeli–Palestinian conflict, ongoing denial of refugees' rights and recurrent armed conflict in some UNRWA locations, the policies and contributions of UNRWA's donor countries, and changes taking place within the refugee population itself. (*2*)

About 2 million Palestinian refugees live in Jordan and constitute 42% of all registered Palestinian refugees with UNRWA (Table 11). Most of the refugees have been granted citizenship and have the same access to health care as other Jordanian citizens. However, refugees who are not citizens, such as those who emigrated from the Gaza Strip in 1967 (about 130 000 refugees), face restrictions on access to state-funded health care, making UNRWA their main health care provider. They also face restrictions on access to higher education and jobs. Therefore, they are the most vulnerable group (*1*).

Table 11. Distribution of registered Palestine refugees according to field of operation

Field of operation	Official camps	Registered refugees in camps	Total registered refugees
Gaza Strip	8	499 231	1 090 932
Jordan	10	339 668	1 967 414
Lebanon	12	224 194	421 993
Syrian Arab Republic	9	126 453	467 417
West Bank	19	195 770	771 143
Agency total	58	1 385 316	4 718 899

Source: UNRWA. Jordan Field Health Programme, 2010, unpublished.

Jordan is a lower-middle-income country with limited agricultural land, no oil resources and considerably scarcity of water. Its only natural resources are potash and phosphate. Including its large Palestinian population, it has 6 million people.

The population is highly (80%) urbanized. Most of the urban dwellers live in the capital, Amman. Most of the nearly 2 million Palestinian refugees in the country live in the neighbouring city of Zarqa. Jordan's population is one of the youngest among lower-middle-income countries, with 35% of the population being under the age of 14 years. Although demographic growth is slowing, the total population is expected to reach almost 7 million by 2015. Jordan's per capita gross national income in 2010 was US$ 4335 (*3*).

Refugees in Jordan benefit from considerable integration into Jordanian society, which increases their prospects for human development and poverty alleviation compared with refugees living in other UNRWA fields. The socioeconomic gap between the Palestinian refugee population and the host population in Jordan is minimal. However, substantial socioeconomic gaps remain between camp refugee populations, and non-camp refugee and host populations. Palestinian refugees in Jordan have achieved similar results for selected Millennium Development Goal (MDG) indicators such as infant mortality rate, immunization, deliveries attended by skilled health personnel and maternity death rate as those achieved by the host country (Table 12).

Table 12. Selected MDG indicators for Palestinian refugees in Jordan, 2009

MDG	Indicator	UNRWA	Jordan
MDG4: Reduce infant mortality	Infant mortality rate (per 1000 births)	22.6	23
	Infants aged 12 months fully immunized (%)	99.3	100
	Children aged 18 months who have received all booster doses (%)	98.9	99
MDG5: Improve maternal health	Deliveries attended by skilled health personnel (%)	99.9	99
	Maternal mortality ratio (per 100 000 births)	22.4	19
	Contraceptive use among married women of reproductive age (%)	53	59
MDG7: Environmental sustainability	Camp shelters with access to safe water (%)	99.3	99
	Camp shelters with access to sewerage facilities (%)	90	98

Source: UNRWA. Jordan Field Health Programme, 2010, unpublished.

UNRWA health programme

Goals and policies

UNRWA's goal to provide the best possible health care to Palestinian refugees is part of the greater joint mission of the United Nations and national governments to address the social determinants of health and to achieve health equity. Under this goal, UNRWA has three strategic objectives for the medium term:

- to ensure universal access to quality comprehensive services;
- to protect and promote family health;
- to prevent and control disease;
- to sustain acceptable environmental conditions in refugee camps.

The primary objective of UNRWA's health programme is to protect, preserve and promote the health status of Palestinian refugees and to meet their basic health needs consistent with basic WHO principles and concepts, and standards of public sector health services in the Region.

UNRWA's overall health policy focuses on the direct provision of essential health services to the Palestinian refugee population. These services fall into two main categories:

- medical care services comprising primary health care provided free of charge through UNRWA's network of primary health care facilities and mobile clinics, with emphasis on maternal and child health services, including family planning, disease prevention and control, and assistance towards the cost of secondary medical care at public and private health care facilities;
- basic sanitation and related environmental health services, including the planning and implementation of projects for sustainable development in refugee camps.

Health policies, strategies and procedures are clearly defined through a series of technical guidelines, management protocols and manuals that cover all programme components and are periodically updated to be consistent with recent advances in medi¬cal technology and best public health practices.

It is evident that primary health care best practice principles and core values are clearly reflected in the goals, strategic objectives and policy directions of the UNRWA health programme.

Governance and management

The Department of Health headquarters in Amman is managed by the Director of Health and his Deputy. The Director of Health reports to the UNRWA Commissioner General on administrative and policy matters and to the WHO Regional Director for the Eastern Mediterranean Region on technical matters. In each of the five fields of UNRWA's area of operation (Jordan, Lebanon, Syrian Arab Republic, West Bank and Gaza Strip), the Health Department is headed by a Field Health Programme Chief, who reports directly to the Field Director on administrative issues and to the Director of Health on technical matters (Figure 4).

Health policy, establishment of targets and development of plans of action to achieve them are usually decided at meetings between the Field Health Programme Chief and headquarters senior staff, and at divisional meetings between staff from the technical units in headquarters and the fields.

This clearly indicates that the organizational structure and the health system governance at UNRWA are built around best practice principles.

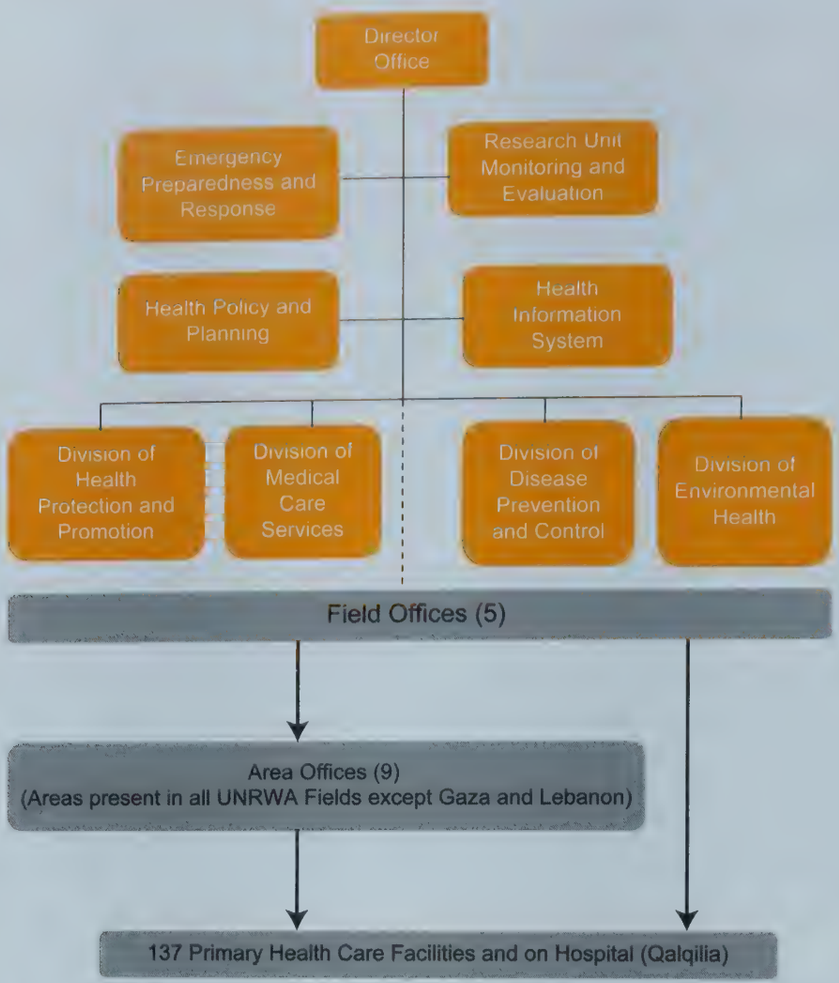

Figure 4. Organizational chart of the Health Department, UNRWA (*1*)

UNRWA health programme in Jordan

Health services for Palestinian refugees living in Jordan are provided through a network of 24 health centres (16 inside and eight outside the camps) and through reimbursement of costs of treatment at public hospitals for secondary and tertiary care.

Almost all of the health centres (23) are located in the middle and northern regions of Jordan. The UNRWA annual budget for health in Jordan for 2010 was 18 million US dollars, with an annual per capita expenditure on health of $US 15, the lowest among host countries. The health centres deal with 2.3 million visits each year. The Field Health Programme in Jordan employs about 1064 staff members, including 112 medical officers and 262 nurses.

Objectives of the study

This study was designed to:

- provide a sociodemographic and geopolitical background to the Palestinian refugees living in Jordan;
- assess and document the organization of primary health care services delivered by UNRWA to Palestinian refugees (e.g. access, utilization, appropriateness, comprehensiveness, continuity);
- assess community participation and intersectoral collaboration for health development;
- assess level of satisfaction of clients and health care providers;
- share lessons learnt in relation to the objectives, processes, achievements, obstacles, results gained and present options for replicability of the selected best practices that enhance delivery of primary health care services in the study area.

Study setting

The study documents good practice in the provision of primary health care services provided by UNRWA to Palestinians living in refugee camps and urban areas in Jordan. Two UNRWA primary health care centres were selected for this purpose: Nuzha and Baqa'a. These two health centres were selected because they are among the largest UNRWA health centres in Jordan providing comprehensive primary health care services and are located in urban areas highly populated by Palestinian refugees..

Nuzha health centre provides primary health care services for an estimated population of 98 800 Palestinians living outside refugee camps in Nuzha urban area, north-east of Amman. Baqa'a health centre provides primary health care services for 100 000 Palestinian refugees living in Baqa'a camp, which is located north-west of Amman in Balka governorate. Baqa'a camp is considered to be the largest Palestinian refugee camp in Jordan.

Methodology

The study mainly adopted a qualitative approach. Secondary data about the structure of UNRWA health services and the primary health care programme in Jordan were derived from relevant reports and studies prepared by the UNRWA Health Department and field visits and interviews with referents. Figure 5 shows the framework design that was followed throughout the study.

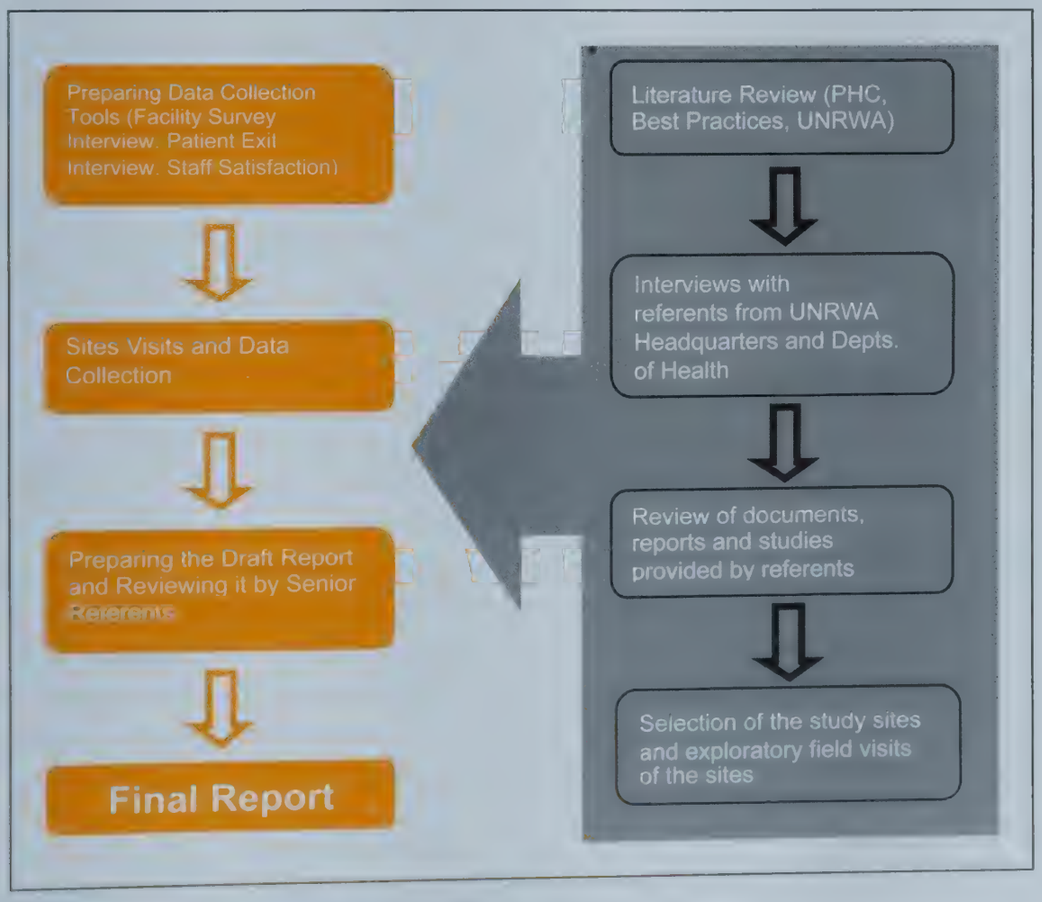

Figure 5. Framework of the study design

Specific data about the study setting (Nuzha and Baqa'a health centres) were collected during the following interviews. It is important to emphasize that neither the client satisfaction interview nor the staff satisfaction survey were designed to serve as stand-alone surveys, as the sample size for each tool was very small and was not necessarily representative of the study population. Rather, the tools were used to perform quick assessments to complement the results of the qualitative analysis.

Facility survey interview

The facility survey interview included questions about the catchment area; access to care; ongoing care; coordination of patient care; information systems; comprehensiveness of care; family focus and community participation. The questions were answered by the Director of each health centre during an in-depth interview with the researcher. This tool was adapted from the Primary Care Assessment Tool (PCAT), 2009 version. The PCAT instrument was developed by the Primary Care Policy Centre, John Hopkins University in 1998 and has been used to evaluate primary health care services in the Canada, the United States of America and other countries (*3*).

Client exit interview

A client exit interview was used to perform a quick assessment of client satisfaction with the health care services provided by each centre. This tool was adapted from the PCAT, 2009 version (*4*) and covered topics related to accessibility of service; waiting time; medical and nursing staff; continuity and availability of services; cost of services; facilities and supplies; and privacy and confidentiality. The exit interview was conducted after the client had received health care services.

A total of 25–30 clients (five or six from each clinic: noncommunicable diseases, maternal and child health, general practice, gynaecology, dentistry) were selected from each centre using a convenient cross-sectional sample. The interview was conducted by a trained interviewer (a health management graduate student) and verbal consent was taken before initiating the interview. A room was assigned by the Director of the health centre for the interview, which usually lasted 15–20 minutes. Interviews were with adult patients, or with the parent (usually the mother) if the patient was a child. The main purpose of the interview was to reflect customer perception and experience about the health services provided.

Staff satisfaction survey

A staff satisfaction survey was also used to perform a quick assessment of the job satisfaction of the staff working in each health centre. The survey covered topics related to job satisfaction, work environment, supplies, management, staff competences, patient satisfaction as perceived by staff, and overall satisfaction. This tool was adapted from different staff satisfaction surveys that were used to assess provider satisfaction in primary health care facilities. The survey was completed by 15 and 20 technical staff from Nuzha and Baqa'a health centres, respectively. The staff, representing doctors, nurses and other staff, were randomly selected from the staff log in each centre. Both the client exit interview and the staff satisfaction survey used a five-point scale (very poor: 1; poor: 2; good: 3; very good: 4; and excellent: 5).

Limitations of the study

It is important to emphasize that the patient satisfaction interviews and the staff satisfaction survey were not designed to serve as stand-alone surveys; because of time and budget limitations, the sample size for each tool was very small and did not necessarily represent the study population. Rather, they were quick assessments to complement the results of the qualitative analysis.

Findings

Primary health care services

Nuzha and Baqa'a health centres, like all UNRWA health centres, provide comprehensive primary health care services with a focus on mother and child care, family planning and disease prevention. These services are detailed below.

Maternal health services

Antenatal and postnatal care services are provided in both health centres according to defined standards and procedures with the ultimate objective of reducing pregnancy-related morbidity and mortality as well as reducing neonatal mortality. Women are registered for antenatal care as early as possible after pregnancy confirmation in order to ensure early assessment of the risk status and to carry out effective and timely intervention, as and when necessary.

The risk approach is used as a tool to provide preventive care to the majority of pregnant women whose condition is normal and to give special attention and care to those identified at risk. In addition, UNRWA subsidizes the hospital delivery of high-risk pregnancies and women who experience complications during labour.

UNRWA places special emphasis on surveillance of maternal deaths, with the main objectives being to investigate the direct and indirect causes contributing to such deaths and to adopt appropriate intervention strategies to reduce mortality from preventable causes.

Family planning

The main objective of the family planning service is to promote the health of mothers, children and subsequently their families. This is achieved through the provision of a high-quality family planning programme that advocates birth spacing to avoid too frequent, too early and too late pregnancies.

Both health centres offer a wide range of modern contraceptive methods, including pills for breastfeeding mothers, pills for non-breastfeeding women, intrauterine devices, condoms and spermicide vaginal suppositories. These methods are offered to clients free of charge to increase accessibility and acceptability.

Training on proper counselling of clients enrolled in the family planning programme is maintained as an ongoing process aiming at enhancing the skills and capabilities of staff leading ultimately to behavioural changes in reproductive health practices.

Child health

In addition to maternal health services and family planning, both health centres provide several cost-effective preventive measures to reduce mortality among infants and young children. These include immunization, growth monitoring, promotion of breastfeeding, oral rehydration for diarrhoeal diseases, food supplementation for the malnourished, and iron supplementation for the anaemic.

Prevention and control of noncommunicable diseases

UNRWA has made commendable efforts to integrate noncommunicable disease management within primary health care in order to address the changing health needs of the refugee population. An opportunistic screening programme is in place in both health centres for detection of diabetes and hypertension in adults over 40 years who attend the health centres. All new patients have a clinical examination, urine analysis, blood sugar estimation, lipid profile and serum creatinine assay at their first visit. Patients are followed up in general outpatient clinics based on an appointment system.

Table 13. Primary health care and other medical services provided at Nuzha and Baqa'a health centres, 2010

Health services	Nuzha health centre	Baka'a health centre
Preventive services		
Antenatal care	Yes	Yes
Postnatal care	Yes	Yes
Family planning	Yes	Yes
Immunization	Yes	Yes
Growth monitoring	Yes	Yes
Curative services		
General outpatient clinic	Yes	Yes
Noncommunicable diseases clinic	Yes	Yes
Child clinic (sick baby clinic)	Yes	Yes
Special consultation (gynaecologist)	Yes	Yes
Special consultation (cardiologist)	No	Yes
Special consultation (ophthalmologist)	No	Yes
Dental clinic	Yes	Yes
Physiotherapy service	No	Yes
Diagnostic services		
Laboratory	Yes	Yes
X-ray unit	No	Yes
Dispensary services		
Pharmacy	Yes	Yes

Oral hypoglycaemic drugs, insulin and antihypertensive drugs are provided free of charge. Counselling on healthy lifestyles is given by nurses and medical officers. Both health centres have introduced a system to monitor follow-up visits of patients and to improve compliance rates.

Curative medical care services

Curative medical care services are also provided in both health centres and consist of outpatient care, dental care and rehabilitation of physically disabled persons, complemented by essential diagnostic and support services such as laboratory and radiological facilities, specialist and special care, and provision of medical supplies.

Table 13 summarizes the primary health care and medical services provided by Nuzha and Baqa'a health centres.

Staff and workload statistics

Table 14 and Table 15 list the staff categories and the monthly workload statistics for each centre, respectively. The health centre operates 6 days weekly (Saturday to Thursday), from 8 am to 2 pm. The two centres have heavy patients' workload with an average of 90 daily consultations per medical officer.

Table 14. Staff categories for Nuzha and Baqa'a health centres, 2010

Staff category	Nuzha health centre	Baka'a health centre
Medical officer (general practitioner)	4	6
Specialist (part-time)	1	3
Dentist	2	2
Staff nurse	2	3
Practical nurse	8	13
Midwife	1	2
Assistant pharmacist	2	5
Technician	2	6
Clerk	3	4
Cleaners, door keepers	4	7
Total	29	51

Table 15. Monthly workload statistics for Nuzha and Baqa'a health centres, 2010

Medical services	No. of clients	
	Nuzha health centre	Baka'a health centre
General clinic	9600	14229
Reproductive health (antenatal and postnatal)	550	1520
Family planning	636	631
Child health clinic	1883	3724
Noncommunicable diseases clinic	3869	3750
Dental clinic	886	2171
Physiotherapy visits	NA	541
Laboratory tests	5966	6974
X-rays	NA	306

NA service not available.

Best practices in UNWRA primary health care, including at Nuzha and Baqa'a health centres

The evidence provided by the site visits, along with the review of UNRWA documents, interviews with referents and the findings of the data collection tools demonstrate that, with limited resources, UNRWA has succeeded in building a health care system based on the criteria and principles of primary health care best practice. In addition to the best practice principles relating to sound policy, legal and institutional framework (structure and governance) that are adopted at the macro level of UNRWA's health care programme, the following best practices were found in both Nuzha and Baqa'a health centres and would most likely be found in all UNRWA's health centres.

Universal coverage and accessibility

All registered Palestinian refugees, irrespective of their income, social status or gender, are eligible for UNRWA health services. Nuzha and Baqa'a health centres, as other UNRWA health centres, are located in refugee camps or in residential areas within walking distance for most of the targeted population.

UNRWA health services are provided according to the needs of the patients and not according to their ability to pay. All primary health care services, including medicines, are provided free with no charges or copayment. Most of the primary health care services and programmes are designed to serve the vulnerable refugee population, i.e. mothers, children and the elderly.

Comprehensive, integrated and continuing care

The health centre provides comprehensive and in¬tegrated primary health care, comprising outpatient medical care services, disease prevention and control, maternal and child health and family planning services.

UNRWA has adopted the life-cycle approach to health care as a tool for providing comprehensive, integrated and continuing for refugees from preconception to active ageing (Figure 7) (5). In the maternal and child health clinic at Nuzha and Baqa'a health centres, comprehensive and integrated care is offered to women of reproductive age, to infants and children of 0–3 years of age, and to school-age children. Strong emphasis is placed on continuity of care and finding those who, for whatever reason, stop attending scheduled follow-up visits. There is a proactive system of risk assessment, surveillance and management in place. Family planning services are fully integrated within the maternal and child health services in each health centre.

As in all UNRWA's primary health care centres, noncommunicable disease care is also fully integrated within activities. It is based on technical guidelines and standard management protocols, emphasizing the risks factors and supporting appropriate health-promo¬ting activities.

Source: (5)

Figure 7. UNRWA's life-cycle approach to health care

UNRWA also has much experience in the Region with regard to integration of special programmes into its primary health care activities, including control of noncommunicable diseases, prevention of micronutrient deficiencies, school health and family planning services.

Emphasis on promotion and prevention

All UNRWA's health programmes are designed and built on health promotion and prevention of disease, death and disability. The following objectives of the maternal and child health programme, which are directed at more than 60% of the registered Palestinian refugee population, clearly reflect this principle:

- to reduce pregnancy-related morbidity and maternal mortality from preventable causes by regular monitoring of women registered at mother and child health clinics;
- to reduce infant and early child morbidity and mortality through regular growth monitoring and protective immunization of children registered at mother and child health clinics, as well as by early detection and management of morbidity conditions;
- to promote the health status of school children by regular monitoring, booster immunization and early detection and treatment of morbidity conditions amenable to management;
- to reduce maternal, perinatal and infant morbidity and mortality by offering family planning services to women of reproductive age, with special emphasis on child spacing.

An opportunistic screening programme is in place for detection of diabetes and hypertension in adults over 40 years who attend any of the health centres.

UNRWA's school health programme places special emphasis on regular screening for early detection of physical impairments and morbidity conditions amenable to management. Preventive oral health is an essential component of the programme.

UNRWA continues to devote special attention to early detection and management of micronutrient disorders, especially iron-deficiency anaemia, which is still highly prevalent among preschool children and women of reproductive age.

Neonatal screening for phenylketonuria and hypothyroidism was integrated into URWA's health programme in Jordan in August 2009. The programme aims at quick identification of neonates with rare, serious but treatable disorders. Early diagnosis and treatment of affected infants results in normal growth and development and significant reduction of human and financial costs for families and society.

Family and community-based programmes

Most of UNRWA's health programmes and the services provided by the health centres are family focused. "Healthy family" files, which contain the medical history of each family member including a list of any chronic and familial diseases, are maintained in the health centres.

Despite their heavy workload at the UNRWA health centres, health professionals also carry out home visits to follow up special cases, including high-risk deliveries and communicable diseases. They are also involved in activities to improve the environment of populations served by the health centre.

Mechanisms to encourage community participation

UNRWA tries to increase community participation and involvement in all activities and programmes aimed at health development in line with the WHO Global strategy for health for all policies. Health education and promotion programmes are implemented at facility and community levels through materials developed by UNRWA and other health-related agencies such as WHO.

A camp health committee has been established to ensure that community members are involved in the assessment, planning, implementation, monitoring and evaluation of primary health care services. The committee also follows up daily health issues in each camp. Members of the committee include representatives from the health centre, the camp administration, the education department, local leaders, the police, and frequent users of the health centre.

Intersectoral partnership and collaboration

UNRWA's health department has adopted the integrated community-based actions framework as an integrated, bottom-up approach to socioeconomic development along with other UNRWA programmes. It aims to reduce poverty in camps, improve health and environmental conditions, achieve better quality of life for Palestinian refugees and integrate health policies and programmes in all UNRWA strategic development agendas.

UNRWA's health programme is partnered with national institutions, nongovernmental organizations, the private sector, academia and international organizations. It cooperates and coordinates with WHO and other United Nations agencies by participating in different thematic groups.

UNRWA's health department coordinates with the Jordanian Ministry of Health through a number of technical committees on immunization, nutrition, tuberculosis and reproductive health. Contraceptives and vaccines are supplied through the Ministry of Health according to a Memorandum of Understanding between the Ministry of Health and the UNRWA. Contractual arrangements are also made with the Ministry of Health for services that are not provided by UNRWA, including secondary and tertiary hospital care.

For the third time, UNRWA participated in the annual National Breast Cancer Awareness Campaign in Jordan in October 2010, in collaboration with the Ministry of Health. The campaign includes health staff training; clinical breast examination; health education and counselling; training on breast self-examination; and referral of highly suspicious cases for mammography.

In partnership with the Ministry of Health, neonatal screening for phenylketonuria and hypothyroidism was integrated into UNRWA's health programme in August 2009. Specialist training of nursing and laboratory staff to conduct such screening was accomplished with support from the Ministry of Health.

Quality control

The health programme has highly standardized technical procedures, guidelines and management protocols that reflect WHO standards, international evidence-based criteria, approved UNRWA policies and best practice in public health. Monitoring of implementation is carried out through a systematic assessment of outcomes based on measurable indicators and fostered through regular visits to the fields by headquarters staff.

UNRWA had initiated the Total Quality Management Programme, in which each health centre choses a weak point in its results and designs various ways of addressing this.

The working culture of UNRWA is oriented towards improvement of quality of care and performance. This is one of its notable strengths.

Affordability, sustainability and responsiveness

Owing to funding shortfalls and ever-increasing demands, UNRWA's health policy focuses on selection of effective and affordable preventive interventions that yield the greatest possible improvement in population health for the available resources.

The success of UNRWA's health care system can largely be attributed to its ability to adjust programme policies and strategies consistent with the concepts and principles of WHO, as well as to its ability to respond to the changing needs and priorities of the population it serves. As described, UNRWA health centres provide primary health care according to WHO strategies in infant and child health, maternal health, family planning and diagnosis and treatment of common diseases.

The organizational structure of UNRWA, with established field offices, provides the kind of decentralized network, knowledgeable and attentive to local sensitivities, that is capable of responding to the particular needs of refugees within each host country.

Efficiency and cost effectiveness

UNRWA's health care programme offers comprehensive medical care to the Palestine refugee population for less than US$ 15 per capita per year. Considering the programme's tangible achievements and the wide range of services, UNRWA is considered one of the most cost-effective health care providers in the Region.

By using a limited number of effective and essential drugs and efficient methods for procurement of drugs and medical supplies, UNRWA has been able to provide a wide range of services to patients at a relatively modest cost. UNRWA has considerable experience in providing effective primary health care services for relatively modest expenditure and the strategies and overall approach used could provide useful lessons to other agencies.

Though UNRWA is very efficient in making the best possible use of limited resources, more funds should be secured by the international community to sustain and develop existing health services and achieve future improvement of the health status of the refugees.

Human resources

Developing human resources for health is a key element of UNRWA's health strategy. In-service training is regularly offered in health services management, reproductive health and family planning, child health, school health, prevention and control of communicable and noncommunicable diseases, communication and counselling skills, and quality assurance of laboratory services.

UNRWA has embarked on a development project to enhance the skills and capabilities of its medical and nursing staff in the areas of epidemiology, reproductive health counselling, total quality management and information technology.

The results of the health care provider satisfaction survey conducted at Nuzha and Baqa'a health centres show that more than 72% of staff had excellent or very good "overall satisfaction" (Table 16). General satisfaction with job-related factors such as "skills and experiences match job requirements", "reasonable methods and standards to do the job and measure performance", "training needed to do the job" and "stimulating jobs tasks" scored highest in both hospitals. A total of 75% and 65% of staff had excellent or very good satisfaction with these factors at Baka'a and Nuzha health centres, respectively. Staff were least satisfied with "rates of pay" and "opportunity of career advancement within the organization".

Table 16. Staff satisfaction rates (%) at Nuzha and Bakaa health centres, 2010

	Nuzha health centre (n = 15)			Bakaa health centre (n = 20)		
	Excellent/ very good	Good	Poor/ very poor	Excellent/ very good	Good	Poor/ very poor
Job-related factors	65	23	12	75	17	8
Work environment	44	41	15	54	28	18
Supplies and medicines	57	24	19	60	29	11
Management	61	32	7	67	28	5
Overall satisfaction	72	28	–	83	17	–

In general, the administrative, medical and supporting staff at Baka'a and Nuzha health centres are highly motivated and strive to deliver a high-quality service, despite heavy workloads and insufficient resources.

The providers recommend that UNRWA redistribute the workload among staff in a more equitable manner, relate payment to performance, provide more opportunities for career development, add separate rooms for waiting areas, renew equipment and recruit more medical and nursing staff.

It is evident that most of the staff recommendations could be met if UNRWA had sufficient financial resources.

Electronic health information system

The electronic health information system is an integrated computerized health information system that streamlines the collection of data and consolidates information to enhance patient data management and decision-making. The system has been piloted since 2009 at Nuzha health centre. It covers the master patient index, appointment system and three modules: noncommunicable diseases; mother and child health; and pharmacy. The electronic health information system is designed to enhance the quality of health care; increase collaboration among health care teams; increase contact time and decrease waiting time; improve patients' health outcomes through enhanced disease management and rational drug use; and improve the statistical reporting system. The two quick satisfaction surveys that were performed at Nuzha health centre as part of this study showed that clients and providers were happy with the new electronic health information system project.

"The electronic health information system project is one of the things I like best at the health centre; it decreases clerical work and saves more time for patient care." Medical officer, Nuzha health centre

Client satisfaction

The results of the limited and quick client exit survey conducted at both Nuzha and Baqa'a health centres (Table 17) revealed that clients were highly satisfied with the accessibility of services (more than 84% rated it as excellent or very good), followed by "privacy and confidentiality" and "medical staff skills", while they were least satisfied with areas related to "waiting time" and "availability of medicines". They reported that they usually experienced problems with availability of medicines at the end of the month. About 90% of the interviewed clients in both centres rated their "overall satisfaction" as excellent/very good and good.

Table 17. Client satisfaction rates (%) at Nuzha and Bakaa health centres, 2010

	Nuzha health centre (*n* = 25)			Bakaa health centre (*n* = 30)		
	Excellent/ very good	Good	Bad/ very boor	Excellent/ very good	Good	Bad/ very bad
Accessibility of services	90	10	–	84	16	–
Waiting time	35	29	36	29	51	20
Medical staff skills	85	10	5	65	25	10
Nurses and other staff skills	55	28	17	40	45	15
Continuity of care	58	23	19	53	36	11
Facilities, services, equipment and supplies	65	20	15	60	34	16
Availability of medicines	25	55	20	29	40	31
Privacy and confidentiality	73	11	26	63	22	15
Overall satisfaction	64	26	10	59	30	11

Most of the clients surveyed, and especially those who visited maternal and child health clinics, reported that they had received health education and counselling during their visits to the centre. They received counselling in areas such as antenatal and postnatal care; family planning; breastfeeding; immunization; child growth monitoring; and nutrition.

Clients expressed a wish that UNRWA would increase the number of doctors; make medicines more available; expand facilities; and raise the level of cleanliness, especially in bathrooms. They also urged UNRWA to provide emergency and ambulance services.

Research

Since the 1990s, UNRWA has become increasingly interested in policy analysis and research and its Health Department is now integrating research, policy analysis and knowledge management into its work. Tens of research studies and assessment reports have been performed during the past 15 years in areas related to mother and child health and family planning; noncommunicable disease prevention and control; supplies and drugs; utilization of health services; health information; and cost–benefit analysis. The information derived from these studies has been translated into evidence-based policies and programmes.

Conclusion

The impressive achievements of UNRWA in almost all aspects related to best practices in primary health care as presented in this study are not without challenges. The following challenges were identified.

- The workload of doctors at the two centres is excessive and may have a negative impact on delivery of quality care.
- Underfunding is negatively impacting on the availability of the necessary workforce and technology.
- The chronic imbalance between the health needs and demands of the refugee population on the one hand, and the human and financial resources available to the health programme on the other, may lead to the discontinuation of some health services to cope with budget constraints.

- The growing burden of demographic transition and noncommunicable diseases among Palestinian refugees is placing increased demands on an already stretched and underfunded health care service.
- There is a lack of provision for early detection and management of cancer and disabilities.
- There is an absence of a peaceful solution to the Israeli–Palestinian conflict, ongoing denial of refugees' rights, and recurrent armed conflict in some UNRWA locations.

The following action points were identified.

- Explore new means and strategies for resource mobilization to tackle financial problems.
- Engage active participation by the communities to facilitate positive responses from communities to change, whether in relation to existing services or to the introduction of new services.
- Explore possibilities of further collaboration with the Jordanian Ministry of Health and other concerned agencies to obtain human and technical support to sustain its best practice in primary health care.
- Assess the need for services relating to screening for cancers of the breast and cervix and take appropriate measures.
- Adopt volunteers' programmes to attract national and international health professionals to work in overcrowded UNRWA health centres.
- Share best practice in primary health care with host countries.
- Extend or modify health centre operating hours to provide more equitable health service access to those in employment.
- Extend the electronic health information programme to all facilities and train staff in information technology.

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Investing in health, particularly that of the poor, is central to the achievement of the Millennium Development Goals. In support of this strategy WHO's Regional Office for the Eastern Mediterranean is actively promoting in countries of the Region community-based initiatives like Basic Development Needs, Healthy Cities, Healthy Villages and Women in Health and Development. These approaches are based on the principle that good health status – an important goal in its own right – is central to creating and sustaining capabilities of poor people to meet their basic needs and to escape from poverty. The Community-Based Initiatives Series is aimed at facilitating the management of such initiatives. Users of the series may include government authorities, community representatives, WHO and other international agencies and nongovernmental organizations.

Empowering people. Building healthier lives

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